CORPORATE SOCIAL RESPONSIBILITY: CHALLENGES OF IMPLEMENTING MTN DIGITAL LIBRARIES IN NIGERIAN UNIVERSITIES

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Abstract

This study examined the corporate social responsibility intervention in the development of digital libraries in the universities of developing countries. It specifically investigated the challenges facing the MTN Foundation Digital Libraries in the universities in Nigeria and strategies that will engender their effective operation. The research design used for this study was descriptive survey design. A questionnaire titled Evaluation of MTNF Digital Libraries Questionnaire (EMTFDLQ) was designed and used for data collection. Responses were analysed using mean scores and percentages which are presented in tables. Findings show that Corporate Social Responsibility has provided vital impetus to the development of digital libraries in Nigeria. However, time allowed for the usage of the digital libraries, low bandwidth, non-allowance of storage device, system break down are challenges affecting the effectiveness and relevance of the digital libraries. At UNN specifically, the highest challenge is inadequate power supply. Repairs of broken down systems, good governance, cordial relationship between staff and users, functional generator, improve bandwidth, provision of more workstations, allowance of storage devices for download, update of database subscription and creation of awareness of the digital libraries are adoptable strategies for enhancing the effectiveness and relevance of the resources and services of the digital libraries.

Keywords – Corporate Social Responsibility, Developing Countries, Digital Libraries, MTN Foundation, Nigeria, Universities.
Introduction

In 2005, a multinational communication giant in Nigeria (MTN) initiated her Foundation of Corporate social responsibility intervention in three key areas namely: health, economic empowerment and education. The education portfolios include scholarship for outstanding science, engineering and medical students in Universities in Nigeria. It is vital to situate the development of the virtual Libraries they instituted against the backdrop of corporate social responsibility, (CRS). Mac Williams, Siegel and Wright (2004) have defined CRS as “situations where the firm goes beyond compliance and engages in actions that appear to further some social good beyond the interest of the firm. Most corporate law regimes would require every firm to maximize dividend returns to shareholders rather than disperse the firms profit to non shareholders (Friedman 19970). But Carool (1979) provides brooder framework of CSR to include the philosophy of social responsiveness. Along this line of thought, Hopkins (2004) took a perspective look beyond their firm’s duty to shareholders and rather brought stakeholders into focus of corporate social responsibility (CSR). According to him stakeholders exist both within a firm or outside it. He perceives the natural environment as a stakeholder. Therefore he saw the wider aim of social responsibility as creating higher and higher standard of living while preserving for peoples both within and outside the corporation (Hopkins 2004).

Stretching this argument the Stewardship theory of CSR argues ‘there is a moral imperative for managers to do the right things without regard to how such decision affect the firm’s financial performance’ (Donaldson, 1990). But the consideration of the firm’s financial performance is in issue, because CSR can only be effectively performed from a firm’s performance in terms of profit level. The argument is stretched further by Barron (2001) who tried to differentiate socially and privately responsible action. He argues that if the motivation of CRS is to serve society, at the cost of profit, such action is socially responsible but where the action is to serve the bottom line, then it is privately responsible.

Amaeshi et al (2006) provide a critique for CSR. Their study found that “indigenous firms perceive the practice of CSR as corporate philanthropy aimed at addressing socio-economic development challenges in Nigeria”. This finding therefore confirms that CSR is a construct that is localized and socially embedded. It is a little wonder that corporate executives in Nigeria define CSR from the perspective of philanthropy. One of the definitions see CSR as “the corporate act of giving back to the immediate and under community in which organization’s carry out their business in a manner that is meaningful and valuable and relevant to the community” (Amechi, 2006). This author also stated that CSR is a way a company tries to reach out to their host communities by impacting on their environments positively. It was seen also as a means of saying “thank you” to the community in which the company had operated – to show them a sense of belonging.

The issues that arise from these various positions of scholars are as follows. Is CSR truly a philanthropic initiative of the rich multinationals handing down few carrots of goodwill to the beneficiaries? Are CSR initiatives aimed at promoting some social goods? Is it a payback action designed to give out so little from the so much gain/profit made by firms? Is an economic advancement or empowerment programme? Is CSR intending to translate into corporate economic responsibility (CER)? While all these questions are germane to any discourse on CSR, they cannot all be addressed here. What can be discerned from the literature is that CSR as a concept means different things to different authors. It, nevertheless, has been the approach of many CSR initiatives where firms think they know what the
beneficiaries' needs are and then strive to provide what can be regarded as CSR solutions. But where these solutions do not solve the beneficiaries’ problems, real challenges emerge and new strategies become imperative.

Statement of Problems
One aspect of MTN Foundation education portfolios was the development of digital Libraries. The project consisted of providing 128 networked computers with three server drivers, printers and a 100 KWA power generator. In terms of online resources, the project paid for two years subscription to e-resources – journals, books etc. They installed the enabling environment for research and study. Years into the implementation of this project, it is vital to examine the challenges that the digital libraries in two Nigeria’s first generation universities are facing. It is of importance that such an investigation be carried out from the stakeholders’ perspective, while at the same time examining the strategies in the light of indentified challenges. This will contribute to the literature of CSR initiated projects.

Purpose of the Study
The general purpose of this study was to investigate the challenges facing the MTN Foundation Digital Libraries in two Nigerian Universities as well as to identify the strategies that would enhance their effective and efficient operation. Furthermore, a critical review of relevant literature enabled the study to be situated in the context of developing countries. This study is therefore significant because the findings will have implication for policy formulation, CSR initiatives and managers of CSR programmes.

Research Questions
The following research questions guided this study:
1. What are the challenges facing the implantation of digital Libraries of MTN’s CSR in two Nigeria Universities?
2. What strategies could engender the Digital Libraries effective and efficient operation?

Literature Review
The concept of digital library came into existence in the 1990s (Saracevic & Covi 2000). Brown (2005) traced the origin of digital Libraries to Vannervar Bush’s ‘memex dream’ publication. Citing Lesk who assured that by 2015 “We will have the equivalent of a major research library on each desk. And it will have searching capabilities beyond those Bush imagine.” Digital Libraries can be traced to the initiative established through funding in 1994 by the National Science Foundation, the Advanced Research Project Agency, and the National Aeronautics and space Administration in the United States. Under this funding, six U.S Universities were granted a total of $24.4 million for digital library research. The two events that motivated this funding were the sudden explosive growth of the Internet and the development of graphical web browsers (Harter in Brown, 2005). These two developments significantly increased the viability of extending library resources and services beyond their current walls and communities, facilitating the sharing of scarce resources and reaching of under-served populations.

So many definitions have been used to describe this complex information system. Such concepts as virtual Library, Electronic library and library without wall have been used to describe a digital Library. Winifred Lancaster, the Library Science Professor, extended this concept beyond the functions of the Library, using the term paperless society (Brown, 2005).
The definition adopted by the American Digital Library Federation appeared most popular to researchers: Cleveland, (1998). Weech, (2007), Issa, Daura and Blessing, (2009). They defined digital libraries as that which “Provide the resources including the specialized staff, to select, structure, offer intellectual access to interpret, distribute, preserve the integrity of, and ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community or set of communities (Waters, 1999: 1).

A digital Library can be understood as an Information Center with no sense of physical location for an end user. The user can access from anywhere and information can be held anywhere. This is characterized by great computer systems and telecommunication systems in the storage and dissemination of Information. A digital Library offers facilities for accessing collections of automated libraries online (Magara, 2000). A variety of phrases has been used to denote this concept such that there is some confusion in understanding it. Cleveland (1998) noted that the Library community has used several different phrases to denote the concept namely: electronic Library, virtual Library, and Library without walls. It was not clear what each of these different phrases meant. He observed, however, that Digital Library is the most current and widely accepted term used at conferences, online and in the literature. Confusion is that the Internet is also seen as a digital Library or a traditional Library (Harter in Brown, 2005). This author noted that the internet has no physical or logical location; no quality control and no entry barriers; no organization scheme, authority control, or surrogates. He added that it had no concept of author and is fluid and transient. It is accessible to everyone but access may require payment and purchase of equipment by the individual user. Daura and Blessing (2009) corroborated the fact that there are many definitions of digital libraries and that term such as “electronic Library” and virtual Library are often used synonymously.

**Digital Library Development in Nigeria**

Serious application of information technology to library process started in Nigerian University Libraries in early 1990s. The National Universities Commission (NUC) spearheaded the implementation and use of ICTS in Nigerian University Libraries. Akintunde (2010) traced the development of ICT at the University of Jos to 1998 when the University benefited from the University of Iowa e-Granary digital Library. The e-Granary Digital Library was an off-line educational information store. It was also called “the Internet in a box.” It is a high-capacity hard drive that contains more than ten million digital educational resources that can be accessed at extremely high speeds over wired and wireless local area network without using any Internet bandwidth…. It allows access to millions of resources in area where access to the Internet is non-existence, undependable, or inadequate. (e Granary Digital Library Evaluation Report 2008:5).

Ogunsola and Aboyade (2005) commented on the urgent need for Nigerian higher institutions to move from the traditional role of teaching, learning and research to those driven by the information technology. They concluded that any college or University in Nigeria that does not have full Internet connectivity with reasonable speed and relevant ICT facilities in the next few years will not be in a position to fulfill the purpose for its establishment. Adepetun (2010) also observed that “ICT sits at the heart of all of the five hundred top Universities in the World, a league that any of Nigerian universities is yet to break into. The development of information delivery system is a key component of knowledge discovery and modern technology greatly enhances such systems (The Mortenson Centre for International Library Programs, 2004).
The national Universities Network (NUNET) originated in 1994 when it was realized that it was increasingly becoming necessary for Universities to be connected electronically at least through the e-mail. Nwamara in Amkpa and Abba (2009) explained that NUNET in every University was to provide the backbone for networking the campuses and be able to have a dial-up access to the NUC server for uploading e-mail messages. NUNET was aimed at developing a viable local and wide area network in each institution. This was followed by the National Virtual (Digital) Library Project. UNESCO (2003) report recommended that there was a compelling need for the development of a virtual library for higher education institution in Nigeria. According to UNESCO, the Virtual library when it completed the digitization of the ten million books contained in that library users will have access to the same materials, at the same moment that staff and students of Harvard University have access to.

Akintunde (2006) lauded the objectives of the Virtual library pilot scheme, of the Federal Universities selected for the Nigerian Virtual Library pilot scheme but regretted that the websites of the eleven Federal Universities selected for the project revealed grossly underdeveloped digital library services. However, he noted that libraries making some significant changes from the manual to a fully automated library system are funded by external grants, such as Ahamed Bello, Bayero, Ibadan, ife, Jos and PorHarcourt Universities. The Universities of Lagos has a 120-seater complete computer laboratory fully furnished and donated by a mobile telephone company in the country. He commented that the laboratory is an electronic reference library, and the type that should be a model for all academic libraries in Nigeria.

**Constraints to the Development of Digital Libraries in Higher Education in Nigeria**

One of the problems impeding library developments is funding. Poor funding is a recurrent constraint in the establishment and administration of ICT projects in Nigeria - digital library inclusive. Ogunsola and Aboyade (2005) ; Christian, (2008), Molawa (2009) and Speirs (2010) discussed this issue in their different works. Akindunde (2010) noted that funding is critical to any library initiative. This is because automation is very costly, in terms of hard and soft ware’s. According to this author, the rate of adaptation and adoption of ICT to library services have been largely defined by the supply of funds in most Nigerian Universities. This issue of poor funding of viable digital libraries is not peculiar to Nigeria (Anamsi, 2010). Corroborating this point, Waters in Anansi (2010) state that building and maintain digital libraries is expensive. Discussing the issue if funding Gbaje (2007) pointed out that implementation of virtual library require money for computer hardware and software, licensing, training of Librarians in new tools and technologies. This is especially so in such areas as texts selection, scanning, verification and indexing of the materials to be digitized as well as employment of experts with technologies and skills to support and manage them. Money will also be needed to settle copyright holders; to translate content into digital form and to access the resources. Other hardware and software needed for digital libraries include powerful servers, supported by specialized software and personnel to handle these.

Another issue in digital library development in Nigeria is poor reception of the Internet. Internet penetration in Africa is a child’s play when compared to the case in developed World. Ajayi (2002) observed that over 200 universities in the United States have 45 Mbps Internet connectivity; 85% of primary schools have 1.5 Mbps Internet connectivity whereas only a few African Universities have 64 Kbps and higher bandwidth. He articulated the state and use of ICT in Higher Education Institutions in (HEI’s) in Africa as: poor availability and quality of infrastructure, inadequate institutional capacity inadequate human resources capacity, low bandwidth of connectivity, and poor penetration of ICT into HEI’s (Ajayi
This limited access has negative impact on access to global knowledge for Africa (Molawa, 2009). Among the challenges faced is lack of infrastructure - bandwidth challenges for telecommunication and Internet access. Akintunde (2006); Lakan (2008) and Speirs (2010) all corroborate this view. They point at limited access to electricity/ power supplies. Digital libraries cannot function without adequate power supply. This is the reason why institutions and organizations make serious effort in the employment of alternative power supply to supplement public supplies that is epileptic.

Another serious issue is lack of trained personnel for sustainability of ICT (UNIDO, in ECA, 2007; Akintunde (2006) Molawa (2009) and Speirs (2010). Digital Libraries cannot be managed by untrained hands. Without appropriate IT skill training the libraries will be very ineffective in handling modern information infrastructure. To alleviate these dimensions of problems, there is an urgent need to strengthen the capacity level of managers and users of ICTs infrastructure in Nigeria (ECA, 2007). Lack of co-operative ventures as discussed by Akintunde (2006) and Speirs (2010) pose serious challenges to the development of digital Libraries.

Poor policy planning, implementation and sustainability of digital library project are also challenging problems (Akintunde, 2006 and Gbaje, 2007). Added to this is the attitude of some Librarians and management team towards the development of digital library projects. These will be quick to look at the negative sides neglecting the positive sides. One of the ways of tackling the problem of implementation of digital libraries in Nigeria is according to Amkpa and Aba (2009) seeking for external funding in form of donations and grants from donor agencies and non-governmental outfits. Akintunde (2006) also suggested that academic libraries must seek for alternative funding if significant progress will be made in deploying ICTS. Depending on government funding (Federal or State) have been disappointing, because these governments already have so much on their hands to accomplish. It is for this reason that Attama and Obaseki, (2010) and Ajigboye (2010) recommended among other thing public Private Partnership (PPP) as a way of raising funds to alleviate the endemic unavailability of funds for better library services in Nigeria.

**Donor Agencies in the Development of Digital Libraries**

Sustainable access to information and other products can be accomplished in Nigeria through Public Private Partnership (PPP), whereby he government delivers the minimum standard of services, products and care; the private sector brings skills and core competencies; while donors and business bring funding and other resources (Adirije, 2007; Ude n.d and Obodoze (2008). In the MTN Universities connect project, for instance cooperating Universities provide space in their libraries where MTN stocks, state - of – the art ICT facilities and personnel to co-manage the e-library which in turn will be taken over by the Universities at the end of the two years of the implementation of the project (Udeh n.d). This venture has been completed in four universities mapped out for the project – the university of Lagos, ABU, UNN and University of Benin.

International funding agencies like Carnegie Corporation of New York played important rites in Nigerian ICT development program. Carnegie Corporation also supported the establishment of scientific databases at the University of Ibadan. Through the various grants from these international granting agencies, information Technology and Communication Unit (INTECU) was well established on campus of Obafemi Awolowo University Ile-Ife and it is at present responsible for the Internet services in the university. It is indeed a major ICT provider on the campus (Ogunsola and Aboyade, 2005)
The MacArthur foundation, a well known international development partner for the development of higher education in Africa has shown keen interest in supporting the evolution of a competitive Nigeria University system. In continuation of its increasing aid to Nigeria higher education sector, the foundation gave a grant of $350,000 to the commission in support of its key oversight function such as monitoring and quality assurance in the university system (NUC, 2007).

Another venture by an international organization partnering with Nigerian institutions especially the Universities is WiderNet Project. Its Director reported the development of e-Granny Digital Library in Nigeria. According to the Director, it started with him sending CD Rom's to the universities they partnered with in Nigeria. Anunobi, Nwankwo, Oga and Bernard (2011) also reported that FUTO is one of the beneficiaries of e-Grannary, the WiderNet project of the university of Iowa.

Rosenberg (2005) survey revealed that most of the libraries (58%) in Africa received their e-resources either from funded programmes or free of charge (open access accompanying other materials etc). The chief donors were listed as INASP through PERI eLFL, WHO, FAO, CTA, TEAL. (The funders of PERI include DFID, NORAD, Royal Danish Ministry of Foreign Affairs and Sida). On the successful commissioning of the last phase of the MTNF Connect at the university of Benin, Azeez (2011) commented that 'the digital library provides a platform by which student of the institution can keep pace with their counterparts elsewhere in the world, having equal access to books, reports and other learning materials.

On the same issue, the former Education Minister, Dr. Sam Egwu commended MTNF at the formal commissioning of the DL at UNN, for supporting the national effort to bridge the digital divide by donating fully equipped digital libraries to Nigerian universities. The Corporate Services Executive of MTN, Wale Goodluck, stated that students and lecturers shall be given access to vital information they need to excel in their studies with assistance of the Universities Connect. He said it will also enhance the research activities at the ivory towers by availing them resources from libraries across the world. (MTN foundation, 2010). The same story of success came from the Ahmadu Bello University (ABU) Zaria. Kasa (2010) reported that the MTN virtual library has promoted the university goals and objectives of learning and research.

In spite of the success stories of the use of PPP as intervention for the institution of digital libraries in Nigeria giving access to vital information resources for academic enhancement, as in the case of MTNF Universities Connect, there are various challenges to the smooth running of the good objectives of the programmes. One of these is the inability to monitor and evaluate the mechanism and maintain accepted standards. In some arrangements, the contractors buy materials for the library without prior consultation with the library management. Some dubious contractors supply irrelevant or inferior materials to make unnecessary gains. Sometimes incomplete volumes are supplied to the receiving Libraries (Udeh n.d.). Adirije (2007) also commented that the “absence of credible avenues for monitoring and informing interested parties on the progress and status of approved PPP projects should be seen as an avoidable anathema” ( Kiondo in Harle, 2009). The reason for this he said is the lack of centrally coordinated activity in institutions. It is for this purpose that the current study is undertaken.

Methodology

A convenient starting point in the investigation of a study of this nature is a critical review of related literature. Such a review provides a vital synthesis and clarification of concepts related to this study and from that universe of knowledge of the subject under investigation,
existing gap was identified where this study fits in as a jigsaw in that knowledge landscape. A descriptive survey design was used in this study that aims at collecting data from a population and describing the data collected in a systematic manner. The area of study was Nsukka and Zaria in Nigeria. Nsukka is in Enugu State in South East Nigeria while Zaria is a major city in Kaduna State in Northern Nigeria. The population of the study comprised the staff and students of ABU and UNN registered with the MTNFDLs. The staff and students registered at the DLs as at the time of this study were 20,000. The sample size for this study comprised of 395 registered staff and students of ABU and UNN. A questionnaire titled Evaluation of MTNF Digital Libraries Questionnaire (EMTFDLQ) was designed and used for data collection Cluster E of the questionnaire specifically addressed research question one – challenges facing the MTNF Digital Libraries. That Cluster has eleven items on a four-point scale of Very Large Extent, Large Extent, Low Extent and Not at All. Cluster F addressed the second research question on strategies for improving resources and services of the digital libraries. It also has eleven items on a four scale of Strongly Agree, Agree, Disagree-and Strongly Disagree. Clusters A-D were used for analysis relating to another research paper. Responses to the items were analysed using mean scores and percentages which are presented in appropriate tables.

Findings of the Present Study

What are the challenges facing the resources and services of MTNFDLs?

In answering this research question, frequency counts and mean scores of respondents on the problems affecting the resources and services of MTNFDLs of the universities were analyzed and presented in Table 1. The data in the table reveals that out of the eleven (11) identified items, four (4) of the items have mean scores below 2.50 which is interpreted as disagreed while seven (7) items have mean scores above 2.50 which is interpreted as agreed for ABU. The data also shows that out of the eleven (11) identified items, five (5) of the items have mean scores above 2.50 which is interpreted as agreed while six (6) items have mean scores below 2.50 which is interpreted as disagreed for UNN. Specific findings on the challenges facing the digital libraries are as follows:

Power/energy supply

Insufficient power supply has the highest mean response of 3.16 for UNN. The item mean is greater than the criterion mean. Therefore, the statement is positively rated. This implies that it is a factor affecting the effectiveness of the resources and services of the digital library. The item mean for ABU is below the criterion mean and therefore interpreted as negative. This implies that it is not a factor affecting the effectiveness of the resources and services of the digital library.

System breakdown

System breakdown ranked 2nd (3.05) and (2.77) respectively for UNN and ABU. The mean scores for the item are greater than the criterion mean 2.50. This means that the statement is positively rated and it is also a factor affecting the effectiveness of the resources and services of the digital libraries.
<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEMS</th>
<th>ABU VLE</th>
<th>LE</th>
<th>LOE</th>
<th>NA</th>
<th>Mean</th>
<th>Decision</th>
<th>UNN VLE</th>
<th>LE</th>
<th>LOE</th>
<th>NA</th>
<th>Mean</th>
<th>Decision</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Insufficient power supply</td>
<td>49</td>
<td>50</td>
<td>36</td>
<td>57</td>
<td>2.47</td>
<td>Disagreed</td>
<td>103</td>
<td>44</td>
<td>42</td>
<td>14</td>
<td>3.16</td>
<td>Agreed</td>
</tr>
<tr>
<td>2</td>
<td>Low bandwidth</td>
<td>50</td>
<td>70</td>
<td>37</td>
<td>35</td>
<td>2.70</td>
<td>Agreed</td>
<td>31</td>
<td>96</td>
<td>57</td>
<td>19</td>
<td>2.68</td>
<td>..</td>
</tr>
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<td>3</td>
<td>System breakdown</td>
<td>65</td>
<td>52</td>
<td>40</td>
<td>35</td>
<td>2.77</td>
<td>..</td>
<td>93</td>
<td>43</td>
<td>52</td>
<td>15</td>
<td>3.05</td>
<td>..</td>
</tr>
<tr>
<td>4</td>
<td>Storage devices not allowed</td>
<td>79</td>
<td>51</td>
<td>24</td>
<td>38</td>
<td>2.89</td>
<td>..</td>
<td>83</td>
<td>62</td>
<td>27</td>
<td>31</td>
<td>2.97</td>
<td>..</td>
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<td>5</td>
<td>Poor staff relationship</td>
<td>38</td>
<td>44</td>
<td>54</td>
<td>56</td>
<td>2.33</td>
<td>Disagreed</td>
<td>33</td>
<td>31</td>
<td>79</td>
<td>60</td>
<td>2.18</td>
<td>Disagreed</td>
</tr>
<tr>
<td>6</td>
<td>Lack of research skills</td>
<td>31</td>
<td>37</td>
<td>65</td>
<td>70</td>
<td>2.14</td>
<td>..</td>
<td>46</td>
<td>50</td>
<td>44</td>
<td>52</td>
<td>2.47</td>
<td>..</td>
</tr>
<tr>
<td>7</td>
<td>Resources not adequate</td>
<td>48</td>
<td>56</td>
<td>42</td>
<td>46</td>
<td>2.55</td>
<td>Agreed</td>
<td>34</td>
<td>63</td>
<td>53</td>
<td>53</td>
<td>2.38</td>
<td>..</td>
</tr>
<tr>
<td>8</td>
<td>Resources not current</td>
<td>57</td>
<td>57</td>
<td>44</td>
<td>34</td>
<td>2.71</td>
<td>..</td>
<td>34</td>
<td>44</td>
<td>63</td>
<td>62</td>
<td>2.25</td>
<td>..</td>
</tr>
<tr>
<td>9</td>
<td>Time allowed too short</td>
<td>31</td>
<td>96</td>
<td>57</td>
<td>19</td>
<td>2.68</td>
<td>..</td>
<td>65</td>
<td>52</td>
<td>40</td>
<td>35</td>
<td>2.77</td>
<td>Agreed</td>
</tr>
<tr>
<td>10</td>
<td>Fees are charged</td>
<td>46</td>
<td>50</td>
<td>44</td>
<td>52</td>
<td>2.48</td>
<td>Disagreed</td>
<td>21</td>
<td>42</td>
<td>53</td>
<td>87</td>
<td>1.99</td>
<td>Disagreed</td>
</tr>
<tr>
<td>11</td>
<td>Duplication of the databases existing in the main library, e.g. EBSCO Host, etc.</td>
<td>48</td>
<td>51</td>
<td>57</td>
<td>36</td>
<td>2.58</td>
<td>Agreed</td>
<td>31</td>
<td>37</td>
<td>65</td>
<td>70</td>
<td>2.14</td>
<td>..</td>
</tr>
</tbody>
</table>

The non-allowance of the storage devices

The non-allowance of the storage devices at the digital libraries is also a factor hindering the progress of MTNFDLs at both ABU and UNN and ranked 3rd with 2.97 for UNN and 1st with 2.89 for ABU.

Time allowed for the usage of the digital libraries

Time allowed for the usage of the digital libraries was also revealed as factor affecting the effectiveness of MTNFDLs at both ABU and UNN with the item mean of 2.68 and 2.77 respectively. The item means ranked 4th for UNN and 5th for ABU. This implies that the item means are above the criterion mean 2.50 and interpreted as positive.

Low bandwidth

Low bandwidth was revealed to have effect on the effectiveness of the resources and services of the digital libraries with item means and ranking of 2.70 (4th) and 2.68 (5th) for ABU and UNN respectively.

Duplication of the databases

Duplication of the databases existing at the main library such as EBSCO Host ranked 6th as a mitigating factor for ABU. It has an item mean of 2.58 as against criterion mean of 2.50.

Resource inadequacy, etc

Resources not adequate ranked 7th with mean score of 2.55 as against criterion mean of 2.50. The implication is that the statement is positively rated and revealed that the item is a factor affecting the effectiveness of the resources and services of the digital libraries. Fees are charged 8th; insufficient power supply 9th, poor staff relationship 10th and lack of research skills 11th were revealed to have negative effect on the effectiveness of the resources and services of the digital libraries.
services of the digital library in ABU. The items means are 2.48, 2.47, 2.33 and 2.14 respectively. The implication is that the items scores are below the criterion mean 2.50 and therefore interpreted as disagreed. Lack of research skills ranked 6th (2.47); resources not adequate ranked 7th (2.38); resources not current ranked 8th (2.25); poor staff relationship ranked 9th (2.18); duplication of the databases existing at the main library, e.g. EBSCO Host ranked 10th (2.14); and fees are charged ranked 11th (1.99) in order of the items posing challenges to the effectiveness of MTNFDLs in UNN. However, the data reveal that items means fell below the criterion mean 2.50 and therefore interpreted as disagreed. The implication is that they do not constitute a challenge to the digital library's effectiveness.

**What are the strategies that could be used for enhancing the effectiveness of resources and services of MTNFDLs?**

In answering this research question, frequency counts and mean score of respondents on the strategies that could be adopted in solving the problems affecting the resources and services of MTNFDLs of the universities were analyzed. The mean score of 2.50 was used as a criterion mean point in determining this. The summary of the analysis is presented in Table 2.

Table 2 shows the mean scores on the strategies adopted in solving the challenges facing the relevance and effectiveness of the resources and services available at the MTNFDLs in the universities. The data in the table shows that all the items in research question six met the criterion mean 2.50 which is interpreted as agreed. This implies that the respondents are in agreement with the itemized strategies that could be adopted in tackling the challenges facing the effectiveness and relevance of the resources and services available at the MTNFDLs in the universities. Repairs of broken down systems has the highest mean score of 3.59 while the avoidance of duplication of databases already in existence in the main libraries has the least mean score of 2.98.

### Table 2: Mean responses of respondents on the strategies adopted in solving the challenges affecting the effectiveness of MTNFDLs.

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEMS</th>
<th>SA</th>
<th>AG</th>
<th>DA</th>
<th>SD</th>
<th>MEAN</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Provision of more work stations.</td>
<td>246</td>
<td>94</td>
<td>31</td>
<td>24</td>
<td>3.42</td>
<td>Agreed</td>
</tr>
<tr>
<td>2</td>
<td>Good management.</td>
<td>252</td>
<td>126</td>
<td>10</td>
<td>7</td>
<td>3.58</td>
<td>..</td>
</tr>
<tr>
<td>3</td>
<td>Enhance ICT skills of staff.</td>
<td>211</td>
<td>138</td>
<td>33</td>
<td>13</td>
<td>3.38</td>
<td>..</td>
</tr>
<tr>
<td>4</td>
<td>Creation of awareness.</td>
<td>219</td>
<td>123</td>
<td>37</td>
<td>16</td>
<td>3.36</td>
<td>..</td>
</tr>
<tr>
<td>5</td>
<td>Improve bandwidth.</td>
<td>203</td>
<td>144</td>
<td>36</td>
<td>12</td>
<td>3.50</td>
<td>..</td>
</tr>
<tr>
<td>6</td>
<td>Functional generator.</td>
<td>254</td>
<td>91</td>
<td>38</td>
<td>10</td>
<td>3.50</td>
<td>..</td>
</tr>
<tr>
<td>7</td>
<td>Repairs of broken down systems.</td>
<td>271</td>
<td>95</td>
<td>18</td>
<td>11</td>
<td>3.59</td>
<td>..</td>
</tr>
<tr>
<td>8</td>
<td>Update subscriptions.</td>
<td>231</td>
<td>115</td>
<td>31</td>
<td>18</td>
<td>3.42</td>
<td>..</td>
</tr>
<tr>
<td>9</td>
<td>Avoid duplication of databases already in existence in the main libraries.</td>
<td>156</td>
<td>116</td>
<td>83</td>
<td>40</td>
<td>2.98</td>
<td>..</td>
</tr>
<tr>
<td>10</td>
<td>Allow storage facilities for down load.</td>
<td>234</td>
<td>113</td>
<td>27</td>
<td>21</td>
<td>3.42</td>
<td>..</td>
</tr>
<tr>
<td>11</td>
<td>Good/cordial relationship between staff and users.</td>
<td>266</td>
<td>85</td>
<td>26</td>
<td>18</td>
<td>3.52</td>
<td>..</td>
</tr>
</tbody>
</table>

**Discussion of Findings**

The results of the analysis made on the challenges affecting the resources and services of MTNFDLs in the universities show that time allowed for the usage of the digital libraries, low bandwidth, non-allowance of storage device, system break down are challenges affecting the effectiveness and relevance of the digital libraries. At UNN specifically, the highest challenge is inadequate power supply. It was also revealed that the 100KVA generator donated to the library is functional but unable to be put to use due to non-provision of money
to purchase diesel. This finding agrees with Akintunde (2006) who found out that funding is critical to any library initiative. According to him the rate of adaptation and/or adoption of ICT to library services have, so far, been largely defined by the supply of funds in most of Nigerian universities. Other researchers who corroborate these present findings include: Achonna (2008) who found power outage as a problem faced in use of resources by the students of Yaba College of Technology; Ashcroft & Watts (2005) findings include low bandwidth and power supply in the provision of electronic information resources in Nigerian libraries; Kasa (2010) evaluated the performance of MTN Virtual Library in Ahmadu Bello University, Zaria and found that the library is not efficient because of low bandwidth, overstretched infrastructure, inconsistency connectivity and poor staff/patron relationship. Patrons get frustrated when unable to access resources within stipulated/allotted time and believed that obtaining hard copies when forced to print was exploitative. Patron do not see the rationale behind being denied of soft (electronic) copies as part of the centre’s contribution as acclaimed by their objectives. From the findings, repairs of broken down systems, good governance, cordial relationship between staff and users, functional generator, improve bandwidth, provision of more workstations, allowance of storage devices for download, update subscription and creation of awareness of the digital libraries are adoptable strategies for enhancing the effectiveness and relevance of the resources and services of the digital libraries. Achonna’s (2008) study suggested provision of adequate computers; need to popularize the information technology and its usage and to motivate the students to use e-journal resources. Adetoun and Kolawole (2010) also suggested regular orientation on content, adequacy and relevance of e-library to academic activities of staff critical as factors that could encourage the regular use of the e-library by the academic staff. They also suggested provision of a good policy environment, regular updating of e-library content, and adequate provision of infrastructural facilities and training of academic staff on the intricacies of e-library to ensure use of the e-library. A typical electronic database could contain up to 500,000 or more list of published books and journals in a single or different subject areas from different publishers. Hence, the need to be trained or educated on how to search/retrieve, download, print any needed information or perform any other necessary functions or operations with the database with the view to accessing the information sought for.

**Implications of the Study**

The findings and discussions of this study have several implications for CSR agencies, the beneficiaries, senior library manages, policy formulation and sustainability of CSR programmes.

**Implication for CSR**

Corporate Social Responsibility intervention in the development of such facilities as digital libraries must not be construed from the perspectives of philanthropy and altruism. Perceived from such perspectives, CSR agencies will always give the beneficiaries what the (CRS) agencies think the beneficiaries want which invariably fail to address their real need. For example each of the donated digital libraries has 128 computers for use by staff and students. But how can 128 computers serve a student population of nearly 40,000 persons. It would then appear that this CSR intervention was designed to encounter difficulties from take off. The implication for CSR is that beneficiaries must be involved in the design stage of the projects that are planned to serve their interest.
Implication for Beneficiaries

Certainly beneficiaries are not beggars. For example, Universities that are beneficiaries are institutions in their own right. The CSR intervention must be seen as partnership initiative between CSR intervener and the institution of intervention. It must be a partnership that works. If the beneficiary has duties and obligations to fulfil it must do so with a sense of commitment.

Implication for Stakeholders

Students and staff of the benefiting institutions are critical stakeholders in CSR interventions. Their views must count in the entire operation of the CSR facilities. When stakeholders are involved in the whole gamut of CSR intervention, they will perceive the project as their own rather than a handout from a multinational agency.

Implication for Policy Formulation

Where CSR intervention has in-built policies that do not foster the interest of the stakeholders, issues will arise as to whose interest the intervention is designed to serve. For example, why must students not be allowed to save their search result in a storage device? Why must their time of using the digital libraries be limited to only two hours per day? Why must they print downloaded information resources at a lost in the digital libraries? In essence user policy of the digital libraries must be flexible enough to accommodate the interest of their critical users.

Sustainability Strategies

Most CSR interventions are rarely designed to be a continuous corporate economic responsibility. Consequently, most grants awarding agencies will often require benefiting institutions to provide a matching grant; funding agencies will require a counterpart fund from funded institutions. The MTNF intervention required each student to pay less than ten dollar per session into a digital library joint account. The strategy is that after two years of maintaining the digital libraries, subsequent operations of the digital libraries will be executed from that joint account. But when that joint account is not opened for whatever reasons, the sustainability of the project is critically jeopardized. In essence there will be issues where systems break down or subscription to proprietary databases expire or with power/energy supply.

Implication for Senior Library Managers

Senior library managers have critical roles to play in the effective and efficient operations of CSR Digital Library projects. They have a duty to read the memorandum of understanding MOU between the CSR agency and their own institution and ensure that their institutions comply with the provisions of the MOU. Secondly it is within their administrative jurisdictions to ensure that operational and financial issues are resolved in favour of efficiency and effectiveness of the digital libraries. It will be inappropriate for senior library managers to see the “donated” digital libraries as a competitor with the larger university library. Rather the digital libraries must be perceived for what they are vital complement to over all library resources and services of universities.

Conclusion

It is evident from the literature and the findings of this study that Private Public Partnership (PPP) has played a vital role in the development of digital libraries of universities in
developing countries. It is also evident that CSR intervention in developing countries has been perceived as philanthropy or an altruistic initiative. But this means more than philanthropic handout to the beneficiary. Consequently beneficiaries of CSR intervention must be involved from the design stage of the intervention and their view must count in the way CSR intervention facilities are operated. The most critical challenge of CSR intervention is the sustainability of their projects. Where sustainability apparatus are weak, or ill-defined or not implemented, it is a matter of time before the facilities and services fall into a complete state of disuse. It is finally submitted that CSR intervention has provided vital impetus to the development of digital libraries and strategic plan must be designed to ensure their sustainability, in Nigeria as well as other developing countries. It is appropriate to conclude this study with the postulation by Gordon Brown about the current status of CSR. He said that corporate responsibility should go beyond the old philanthropy of donating money to good cause but rather focus on judging results by its outcomes rather than by inputs (Gordon Brown, Chancellor of the Exchequer of the UK government, p.2).

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